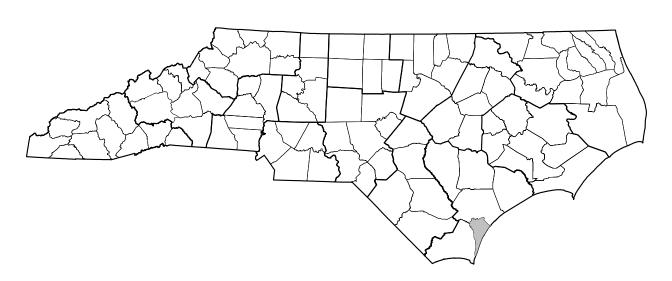
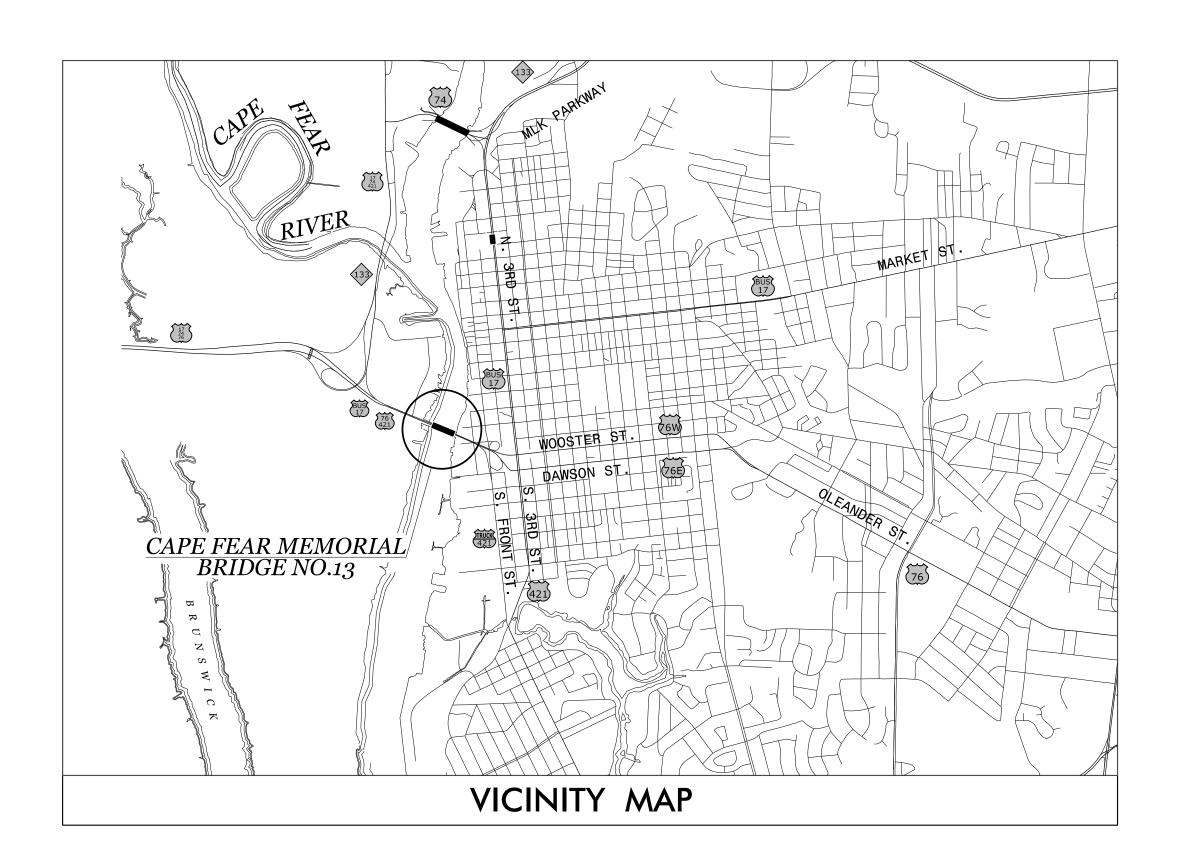
DIVISION 3



CAPE FEAR MEMORIAL BRIDGE NO. 13 (US 17/74/76/421)
OVER CAPE FEAR RIVER IN WILMINGTON







INDEX OF SHEETS

INBOUND AND OUTBOUND OFF-SITE DETOUR SIGNS

WORK ZONE ADVANCE WARNING SIGNS

SHEET NO.

TMP-1



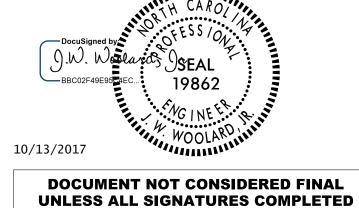
TMP - 10

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SENIOR TRANSPORTATION ENGINEER

JAY WOOLARD, PE ANDREW N. GOOD

TRAFFIC TECHNICIAN



PROJ. REFERENCE NO. SHEET NO. 15B.13.29 TMP-1A

LEGEND

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

GENERAL

DIRECTION OF TRAFFIC FLOW

EXIST. PVMT.

PROPOSED PVMT.

NORTH ARROW

TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

PREVIOUSLY STARTED / CONCURRENT CONSTRUCTION

PAVEMENT REMOVAL

TEMPORARY PAVEMENT

TEMPORARY PAVEMENT ASPHALT PAD

TEMPORARY PAVEMENT BREAKDOWN LANE

PAVEMENT MARKINGS

EXISTING LINES PREVIOUSLY TEMPORARY **PLACED** MARKINGS

WHITE EDGE LINE YELLOW EDGE LINE BROKEN LANE LINES

MINISKIP LANE LINES DOUBLE YELLOW LINES GORELINE

PAVEMENT MARKING SYMBOLS

EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)

STOP BAR

TEMPORARY PREVIOUSLY SYMBOLS <u>PLACED</u>

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING ALPHANUMERIC CHARACTERS

TRAFFIC CONTROL DEVICES

TEMPORARY PREVIOUSLY PLACED DEVICES

BARRICADE (TYPE III)

CONE DRUM

FLASHING ARROW BOARD

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

PORTABLE CONCRETE BARRIER

ANCHORED CONCRETE BARRIER

CHANGEABLE MESSAGE SIGN TEMPORARY CRASH CUSHION TEMPORARY CRASH CUSHION RESET

FLAGGER

PORTABLE CONCRETE BARRIER (RESET)

ANCHORED CONCRETE BARRIER (RESET)

SIGNALS

TEMPORARY

EXISTING

TEMPORARY SIGNING

PREVIOUSLY TEMPORARY <u>PLACED</u> SIGNS

> PORTABLE SIGN STATIONARY SIGN STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

CRYSTAL/CRYSTAL CRYSTAL/RED

YELLOW/YELLOW



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ROADWAY STANDARD DRAWINGS, AND LEGEND

PROJ. REFERENCE NO. SHEET NO. 15B.13.29 TMP-2

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OFTHE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES ON ANY ROADWAY AS FOLLOWS:

ROAD NAME ALL ROADS

DAY AND TIME RESTRICTIONS

5:00 A.M. - 9:00 A.M. DAILY MONDAY THROUGH SATURDAY 3:00 P.M. - 7:00 P.M. DAILY MONDAY THROUGH SATURDAY 5:00 A.M. - 7:00 P.M. SUNDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL **EVENTS AS FOLLOWS:**

ROAD NAME ALL ROADS

HOLIDAY

- 1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 5:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 5:00 A.M. THURSDAY AND 7:00 P.M.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.
 - IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 5:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY AND 7:00 P.M.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 5:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9. FOR THE AZALEA FESTIVAL EVENT, BETWEEN THE HOURS OF 5:00 A.M. THE TUESDAY BEFORE THE WEEKEND OF THE AZALEA FESTIVAL TO 7:00 P.M. MONDAY AFTER THE WEEKEND OF THE AZALEA FESTIVAL.
- 10. FOR THE RIVERFEST EVENT, BETWEEN THE HOURS OF 5:00 A.M. THE FRIDAY BEFORE THE WEEKEND OF THE RIVERFEST TO 7:00 P.M. THE MONDAY AFTER THE WEEKEND OF THE RIVERFEST.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS ALL ROADS 5:00 A.M.-9:00 P.M. EVERY DAY

D) DO NOT STOP TRAFFIC AS FOLLOWS:

DAY AND TIME **DURATION &** ROAD NAME RESTRICTIONS OPERATION ALL ROADS 5 A.M.- 9 A.M. MON.- SAT. 15 MINUTES FOR 3 P.M.- 7 P.M. MON.- SAT. LIFTING OR 5 A.M. - 7 P.M. SUN. WORKING ON

UNSECURED EQUIP.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE. CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE. CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY. CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

TRAFFIC PATTERN ALTERATIONS

I) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- J) INSTALL WORK ZONE ADVANCE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- K) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFFSITE DETOUR ROUTES AS SHOWN IN THE TRAFFIC CONTROL PLANS.

L) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFFSITE DETOURS WHEN THE DETOUR IS NOT IN OPERATION, UNLESS OTHERWISE ALLOWED BY THE ENGINEER.

M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

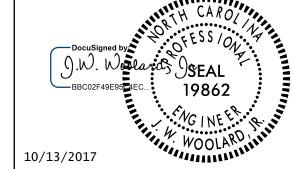
MISCELLANEOUS

- N) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- O) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE; FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- P) THE CONTRACTOR IS TO FURNISH, INSTALL, MAINTAIN, RELOCATE AND REMOVE CHANGEABLE MESSAGE SIGNS DURING VARIOUS STAGES OF CONSTRUCTION AT THE DISCRETION OF THE ENGINEER TO ADEQUATELY INFORM MOTORISTS OF CHANGING WORK ZONE CONDITIONS.
- Q) PLACE ALL CHANGEABLE MESSAGE SIGNS AS NEEDED IN THE LOCATIONS AND WITH THE WORD MESSAGES AS SHOWN IN THE TCP OR AS DIRECTED BY THE ENGINEER TO PROVIDE ADVANCE WARNING TO THE PUBLIC DURING CONSTRUCTION.
- R) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (888) 221-8166 OR(919) 814-3700 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE INCLUDING THE FOLLOWING AREAS OF CONCERN:
 - A. LANE CLOSURE RESTRICTIONS.
 - B. DETOURS OFFSITE AND ONSITE.
 - C. AREAS OF CONSTRICTED HORIZONTAL CLEARANCES (NARROW LANES OR LANES BORDERED ALONG THE OUTSIDE WITH EITHER PCB OR GUARDRAIL).



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GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
15B.13.29	TMP-3

TRAFFIC CONTROL PHASING

PERFORM ALL BRIDGE REPAIR OPERATIONS IN THE PHASING USING LANE CLOSURES OR ROAD CLOSURES AS OUTLINED BELOW:

REFER TO GENERAL NOTES FOR TIME AND HOLIDAY RESTRICTIONS.

LANE CLOSURES

- -INBOUND TO DOWNTOWN WILMINGTON USE ROADWAY STD. DRAWING 1101.02, SHEET 3 OF 9 FOR LANE CLOSURES.
- -OUTBOUND FROM DOWNTOWN WILMINGTON USE SHEET TCP-8 FOR LEFT OR RIGHT LANE CLOSURES.

-WHEN WORKING IN AN INTERIOR LANE ON THE BRIDGE, CLOSE BOTH INBOUND AND OUTBOUND INTERIOR LANES.

ROAD CLOSURES

- -INBOUND TO DOWNTOWN WILMINGTON CLOSE BRIDGE NO.13 IN ACCORDANCE WITH SHEET TCP-4 AND TCP- 5 IN CONJUNCTION WITH ROADWAY STD. DRAWING 1101.03, SHEET 7 OF 9.
- -OUTBOUND FROM DOWNTOWN WILMINGTON CLOSE BRIDGE NO.13 IN ACCORDANCE WITH SHEET TCP-6 AND TCP-7.
- -INBOUND AND OUTBOUND ROAD CLOSURES MAY BE IMPLEMENTED AT THE SAME TIME, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

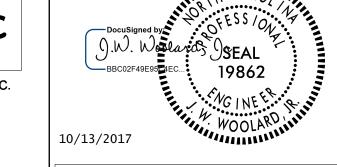
PHASING

- STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS (SEE TCP-10) ON PROJECT NO MORE THAN THREE (3) CALENDAR DAYS BEFORE BEGINNING WORK.
- STEP 2: USING LANE CLOSURES AND ROAD CLOSURES, AS DESCRIBED ABOUVE, PERFORM REPAIR OPERATIONS ON THE CAPE FEAR MEMORIAL BRIDGE NO. 13.
- STEP 3: UPON COMPLETION OF ALL REPAIR OPERATIONS, REMOVE ALL TRAFFIC CONTROL DEVICES FROM THE PROJECT.



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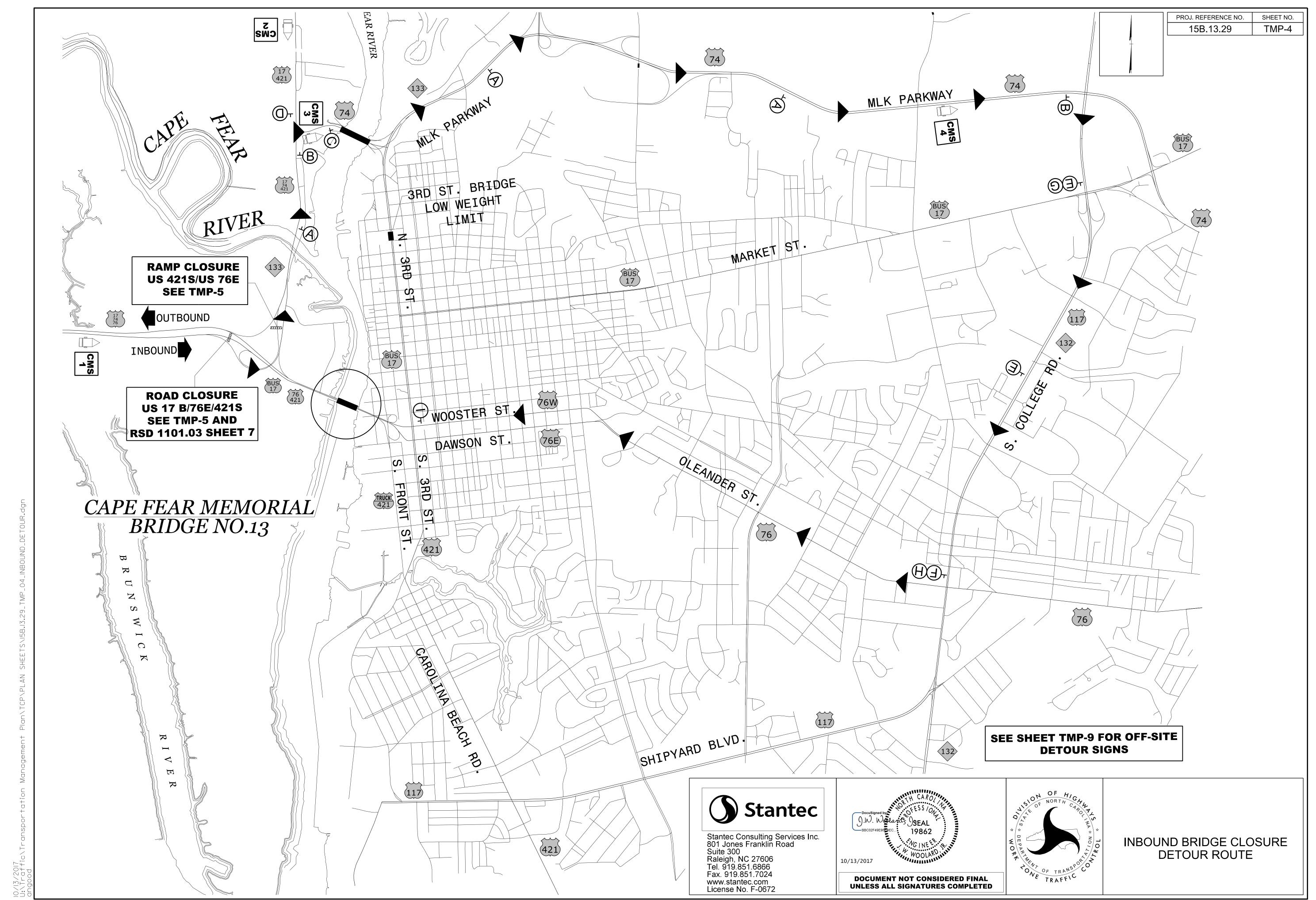
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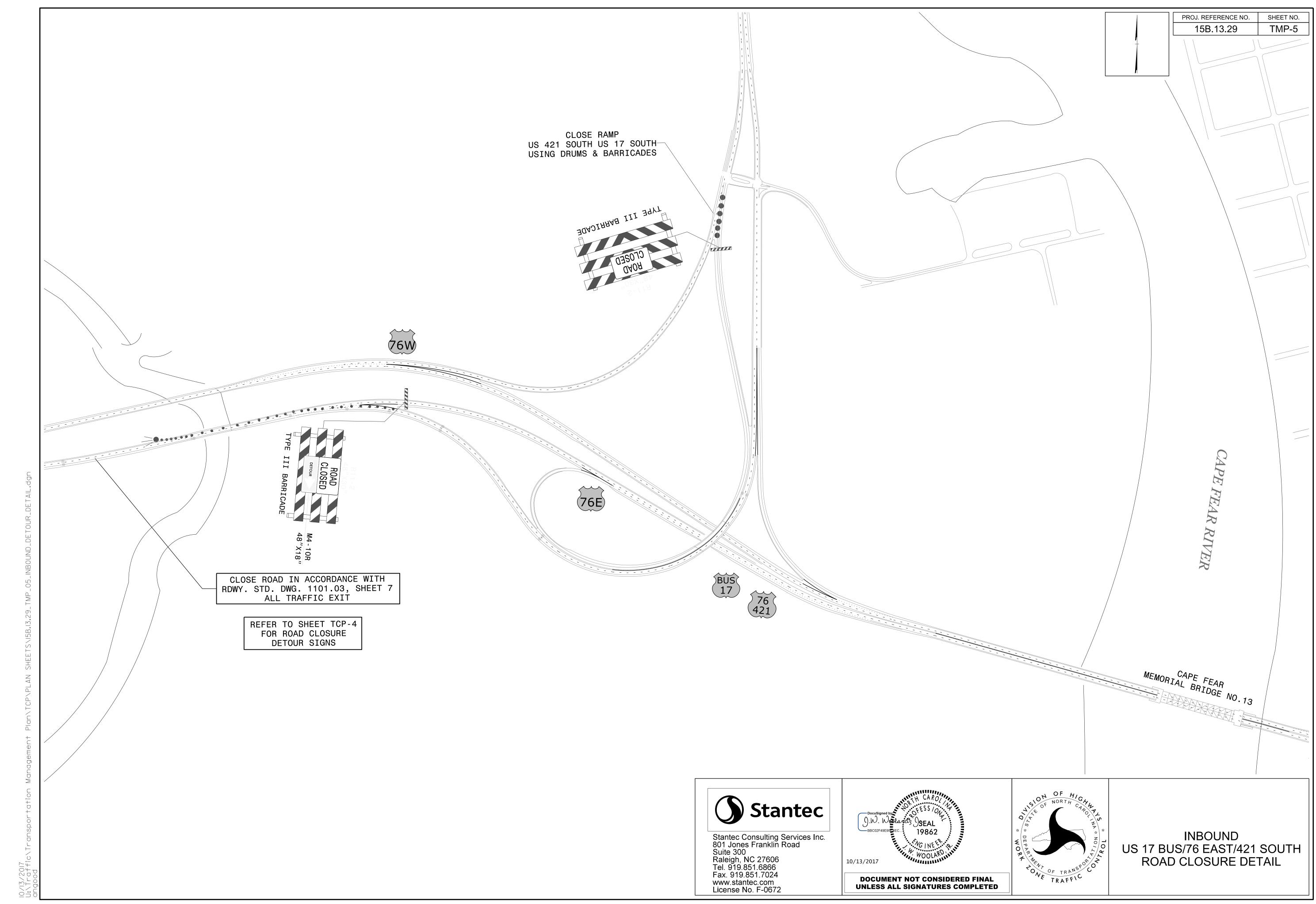


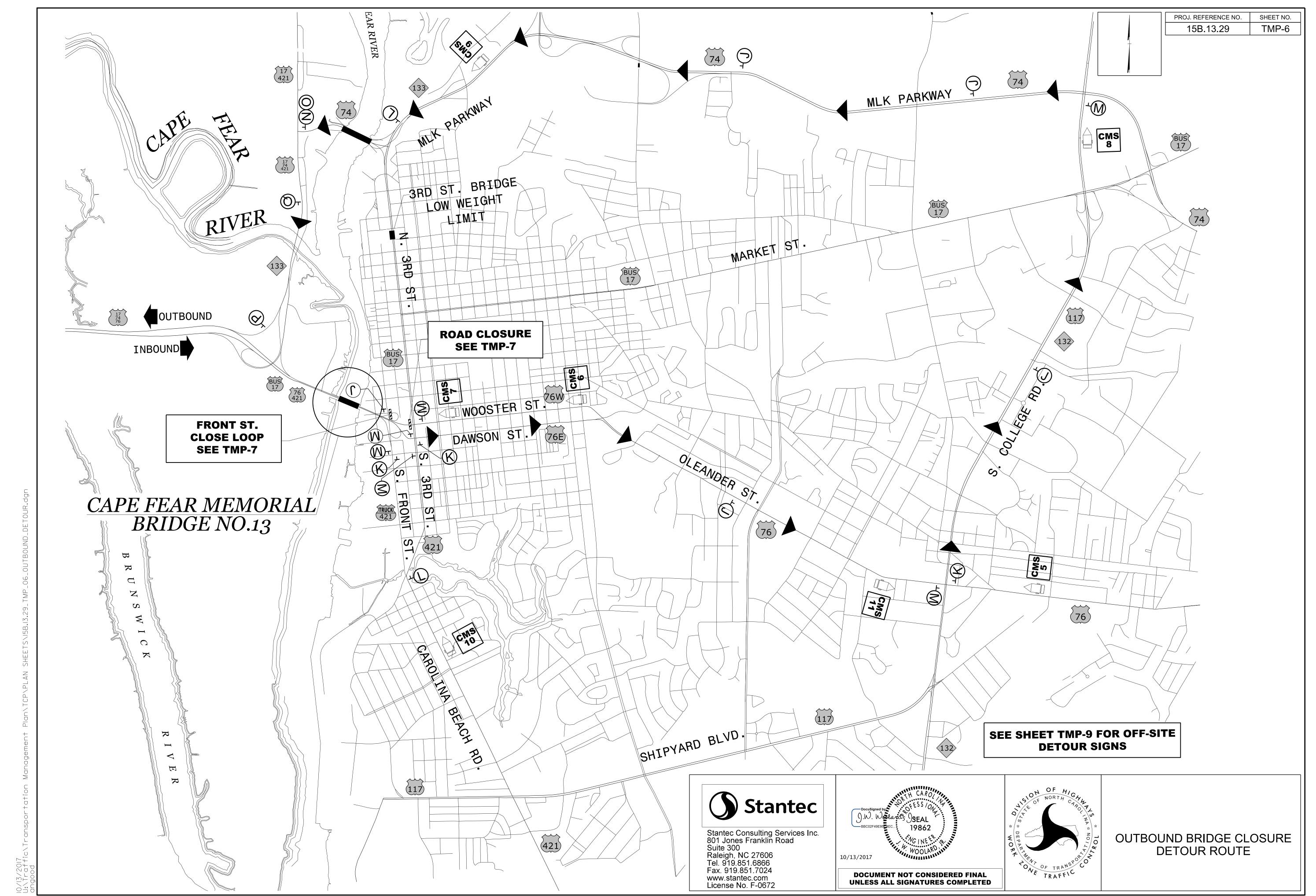
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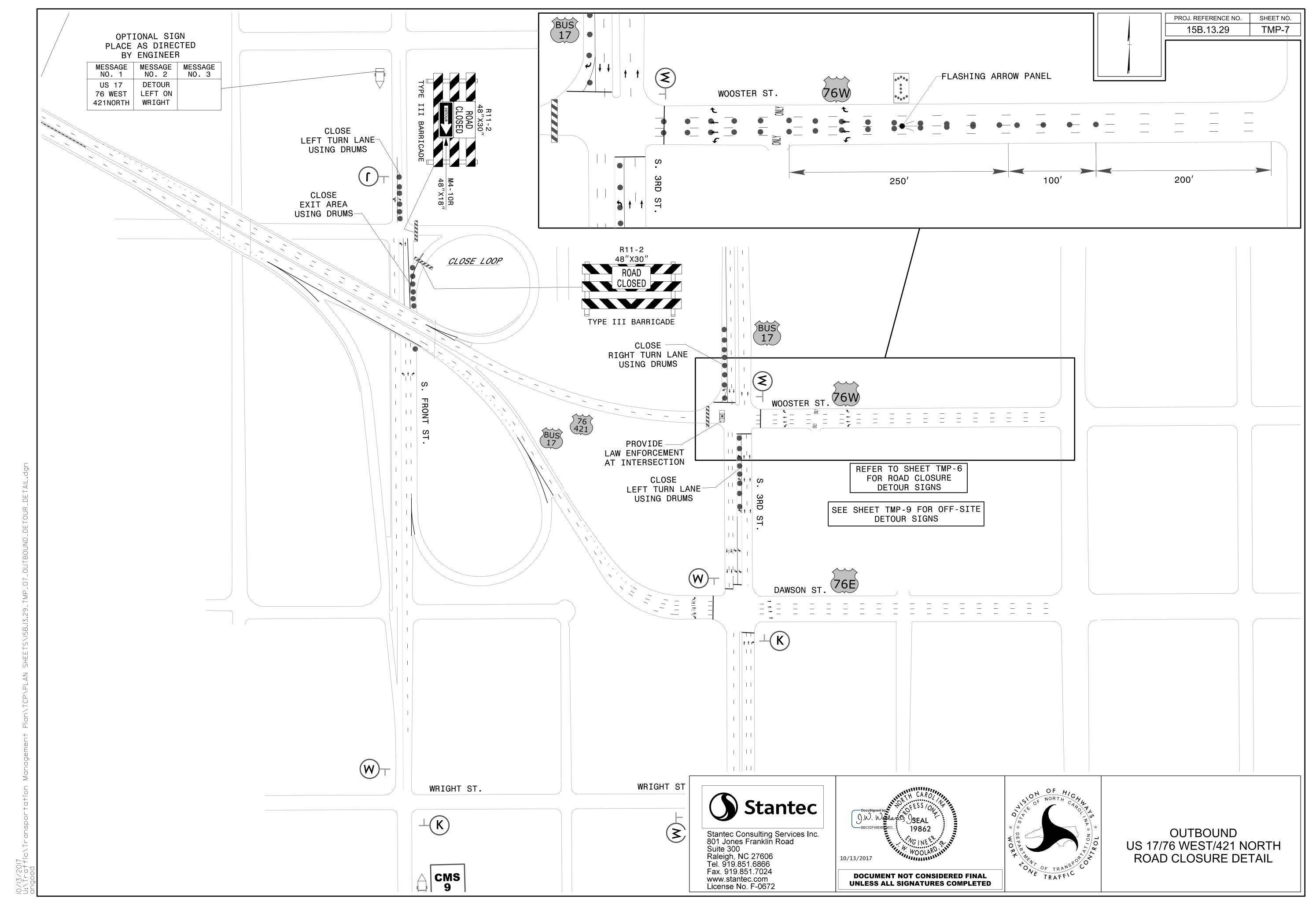


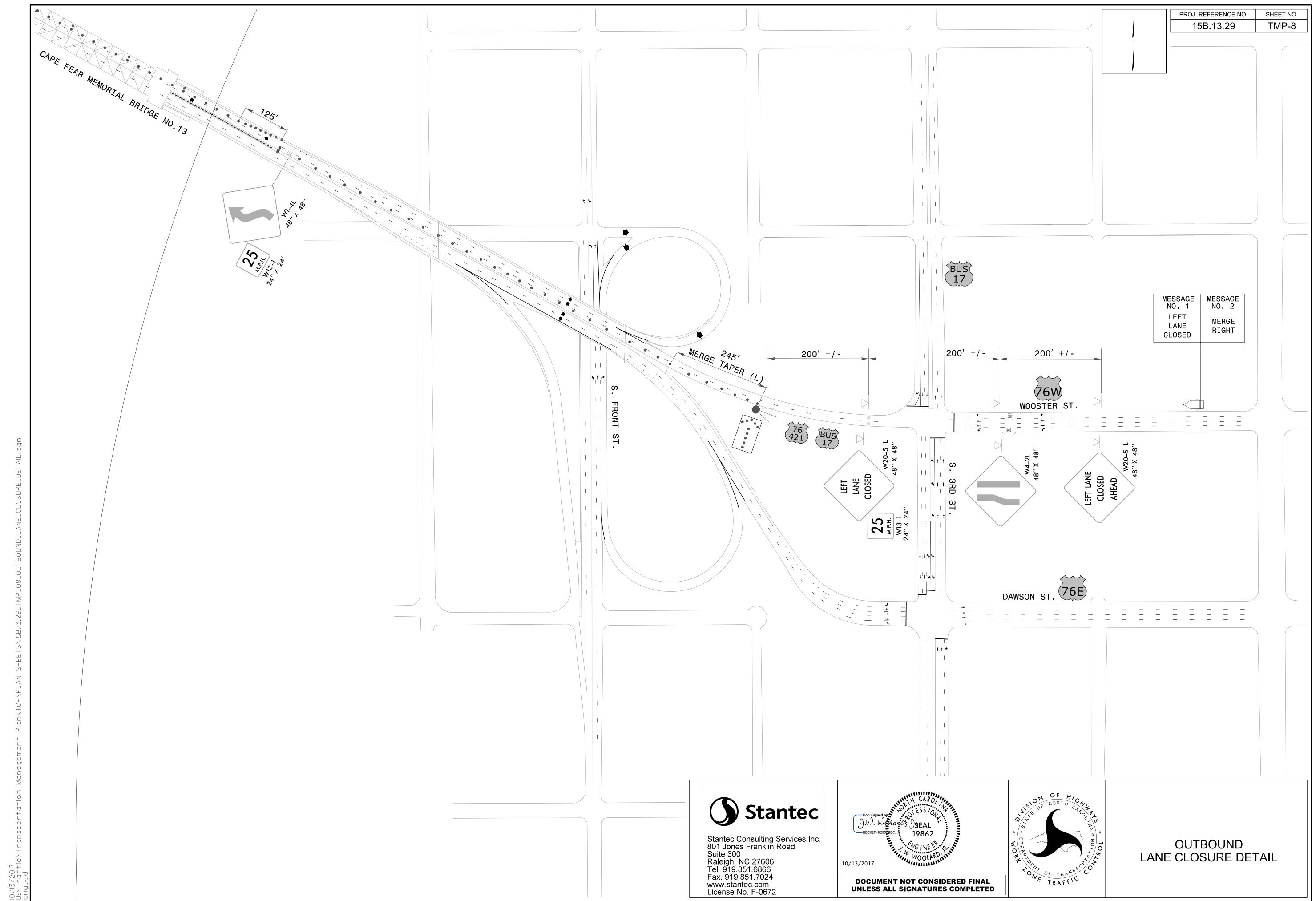
PHASING

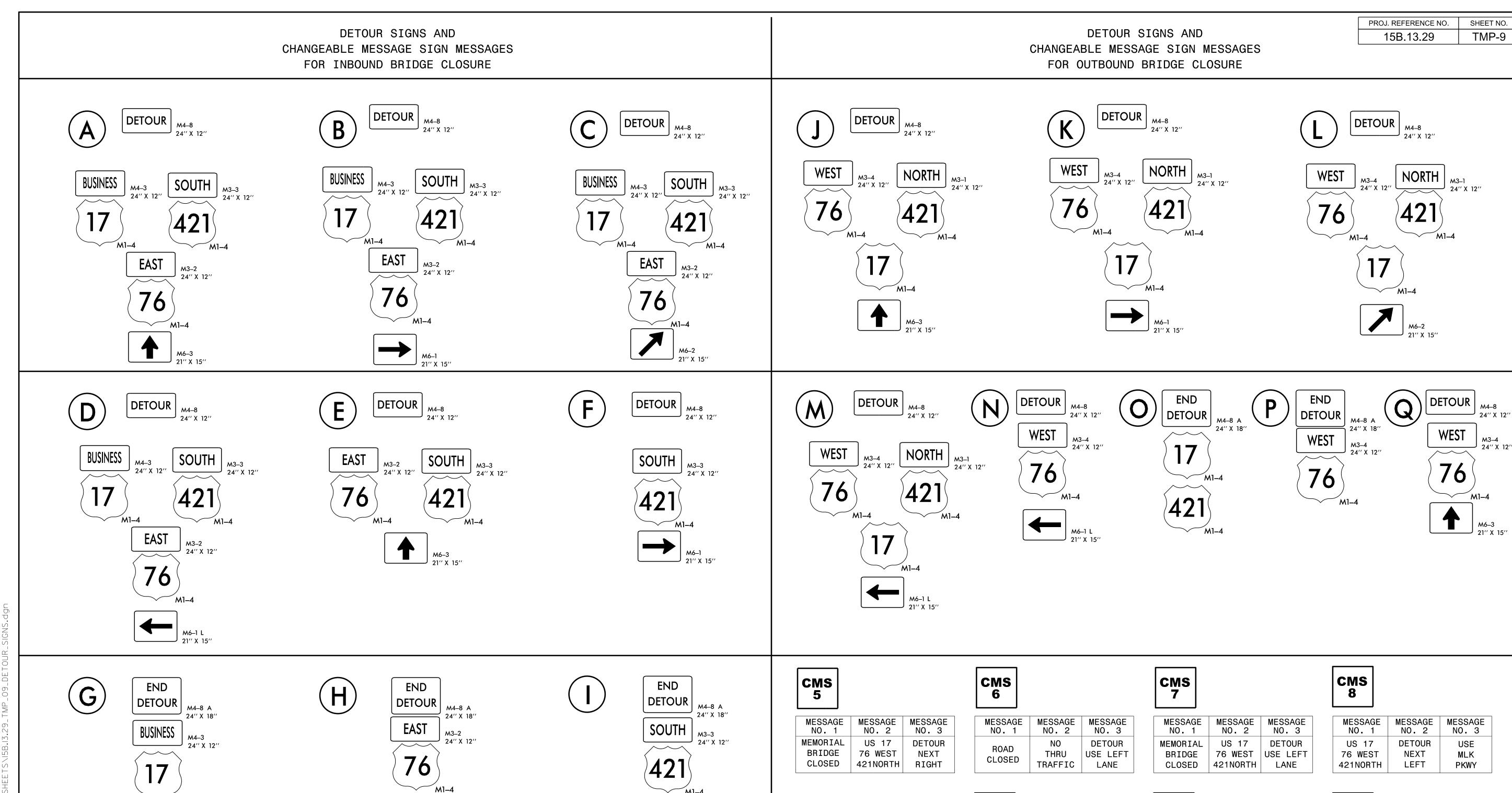














MESSAGE	MESSAGE	MESSAGE
NO. 1	NO. 2	NO. 3
MEMORIAL	17 BUS	DETOUR
BRIDGE	76 EAST	VIA
CLOSED	421SOUTH	74 EAST
323025	72100111	

EXAMPLE MESSAGES FOR PERIODS JUST PRIOR TO BRIDGE CLOSURE MESSAGE | MESSAGE | MESSAGE NO. 3 NO. 2 MEMORIAL 7 P.M. BRIDGE TO TUESDAY CLOSURE 6 A.M.

CMS

MESSAGE	MESSAGE	MESSAGE
NO. 1	NO. 2	NO. 3
17 BUS	EXIT	DETOUR
76 EAST	CLOSED	NEXT
421S0UTH	GLOSED	LEFT

CMS

MESSAGE NO. 1	MESSAGE NO. 2	MESSAGE NO. 3
17 BUS	DETOUR	FOLLOW
76 EAST	EXIT	US 74
421S0UTH	RIGHT	EAST
	•	

CMS

MESSAGE	MESSAGE	MESSAGE
NO. 1	NO. 2	NO. 3
17 BUS 76 EAST 421SOUTH	DETOUR NEXT RIGHT	

EXAMPLE ME	SSAGES FO	R PERIODS
JUST PRIOF	R TO BRIDG	E CLOSURE
MESSAGE NO. 1	MESSAGE NO. 2	MESSAGE NO. 3
NOTICE NEXT TUESDAY	MEMORIAL BRIDGE CLOSURE	7 P.M. TO 6 A.M.

S E E	CMS 9	
	MESSAGE NO. 1	MESSAGE NO. 2
	US 17 76 WEST	DETOUR NEXT

421NORTH

		CMS 10
ESSAGE NO. 2	MESSAGE NO. 3	MESSAC NO. 1
FTOLIR		

MESSAGE NO. 1	MESSAGE NO. 2	MESSAGE NO. 3
MEMORIAL	US 17	DETOUR
BRIDGE	76 WEST	RIGHT ON
CLOSED	421NORTH	76 EAST

76 WEST	NEXT	MLK
421NORTH	LEFT	PKWY
смѕ		

11

	MESSAGE	MESSAGE	MESSAGE
	NO. 1	NO. 2	NO. 3
,	US 17 76 WEST 421NORTH	DETOUR LEFT ON COLLEGE	

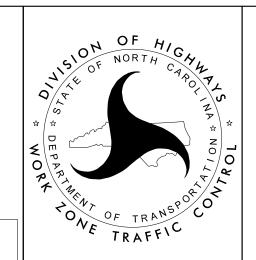


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RIGHT



DETOUR ROUTE SIGNS

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